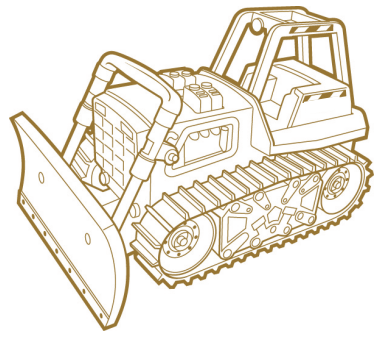


# Silt Fences



## Where are they used?

Silt fences can be an effective tool **when used properly**. They remove sediment partially by filtering the runoff and partially by slowing it down, providing an opportunity for settling. Silt fences are a “perimeter control”, or a device used to prevent eroded sediment from leaving the construction site. Their efficiency for sediment removal ranges from 35% to 86% depending on site conditions.

## Techniques

Silt fences can be used on most construction sites, but their effectiveness is limited by improper design, installation and maintenance.

## Tips for using silt fences effectively:

- 1) Only use silt fences for the following slope and/or length of slopes:

5% to 10%:	no more than 50 feet
10% to 20%:	no more than 25 feet
more than 20%:	no more than 15 feet
- 2) Align the fence parallel to slope contours
- 3) Curve the edges of the silt fence uphill
- 4) Don't use silt fence for contributing areas more than 100 feet away
- 5) Trench in the fabric deeply enough to prevent undercutting
- 6) Spacing the posts no more than eight feet apart
- 7) Use reinforcement if the fence will receive concentrated flow
- 8) Do not install silt fence below an outlet pipe or weir
- 9) Do not install silt fence upslope of the exposed area
- 10) Consider construction traffic when aligning the fence
- 11) Periodically remove sediment deposits behind the silt fence reduce
- 12) Align silt fence to reflect ESC needs, not property lines or work area

## Innovations and improvements

The scoop trap, a “mini-sediment trap” used before a silt fence, provides extra settling and protects the silt fence when it is used in an area of concentrated flow.

# Fast Facts - Silt Fences

Approximate Cost: \$2.50-\$3.50 / linear foot

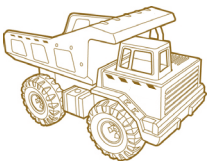
Effectiveness	Low	Mod	High
Erosion/Sediment Control		X	
Long-Term Pollutant Reduction	X		
Habitat/Stream Protection	X		
Ease of Application	Difficult	Average	Easy
Installation	X		
Maintenance	X		

## Limitations

- Steep slopes or channels
- Construction traffic



Left: Silt fences can be effective when installed properly and maintained.



Find more construction site educational materials at:

[cleanwatermn.org/MS4toolkit](http://cleanwatermn.org/MS4toolkit)



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